



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,991	03/31/2004	Christophe Del Toso	852263.412	6081
38106 7590 11/01/2007 SEED INTELLECTUAL PROPERTY LAW GROUP PLLC 701 FIFTH AVENUE, SUITE 5400 SEATTLE, WA 98104-7092			EXAMINER TRAN, KHAI	
			ART UNIT 2611	PAPER NUMBER
			MAIL DATE 11/01/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/813,991

Applicant(s)

DEL TOSO ET AL.

Examiner

KHAI TRAN

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 15-24 and 28 is/are rejected.
- 7) ☒ Claim(s) 6, 11-14, 25-27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed 8/15/2007 has been entered. Claims 1-28 are pending in this Office action.
2. The indicated allowability of claims 4-6, 10-15, 17-20, 22-28 is withdrawn in view of the newly discovered reference(s) to Aria (U.S. Pat. 7,224,672). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-5, 7-10, 15, 16-20, 21-24, 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Arai (U.S. Pat. 7,224,672).

Regarding claim 1, Arai discloses a process for configuring a symmetric xDSL-type modem, comprising: detecting a criterion corresponding to an asymmetric operating mode of an ADSL-type; wherein detecting such criterion includes obtaining an estimation of a length of a line; and in response to the detection, disabling a number of carriers in order to establish the asymmetric operating mode (col. 3, lines 50-55, and col. 6, line 58 to col. 7, line 6).

Regarding claim 2, Arai discloses a VDSL-type modem, and ADSL mode. Therefore, the operation of the VDSL modem and ADSL modem is inherent to operate at 4096 carriers (VDSL modem) and at 356 carriers (ADSL modem).

Regarding claim 3, Arai discloses wherein the detection of the criterion further includes a detection of signals defined in recommendation G.994.1 or a measurement of the signal to noise ratio per carrier (col. 5, lines 14-21).

Regarding claim 4, Arai discloses wherein the criterion is the estimation of the line length derived from a timing advance measurement (col. 2, lines 11-17).

Regarding claim 5, Arai further discloses deactivating a cyclic suffix in a transmit path and digital power spectral density shaping filtering for conformity to an ADSL-type mask, associated with a digital echo suppression filter and a temporal equalizer in a receive path (col. 14, lines 28-42).

Claims 7-10 are similar to claims 1-4. Therefore, claims 7-10 are rejected under a similar rationale.

Regarding claim 15, Arai also discloses wherein switch from ADSL mode to VDSL mode is accomplished in response to user control (col. 3, lines 36-40).

Claims 16-20 are similar to claims 1-2, 4-5. Therefore, claims 16-20 are rejected under a similar rationale.

Claims 21-24 are similar to claims 1-4. Therefore, claims 21-24 are rejected under a similar rationale.

Claim 28 is similar to claim 15. Therefore, claim 28 is rejected under a similar rationale.

Allowable Subject Matter

5. Claims 6, 11-14, 25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: Arai fails to disclose a transmit path comprising: activating a digital power spectral density shaping filter (PSF) for conformity with an ADSL-type mask; deactivating a process for inserting a cyclic suffix after each symbol to be transmitted; activating a $H^{-1}(f)$ pre-compensation before an inverse Fourier transform allowing to compensate for a phase and amplitude distortion introduced by the digital PSF; and in a receive path, activating a digital echo suppression filter and temporal equalizer.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAI TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on (571) 272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KHAI TRAN
Primary Examiner
Art Unit 2611

KT
October 18, 2007